

REMARKS

Claims 1-9 are now pending. Claims 1, 2, and 4-9 have been amended. Claims 10 and 11 are new. A provisional election was made with traverse to prosecute species I (Figures 1-3 and 6), claims 1, 2 and 4-9. Applicant hereby affirms the election, *for search purposes only*, to prosecute species I (Figures 1-3 and 6), *with traverse*. Claims 1, 2 and 4-9 read on the elected species. Furthermore, new generic claims 10 and 11 are readable upon the elected species of Figures 1-3 and 6.

Applicant elects this species with traverse, because the subject matter of the listed species (Figures 1-6 and 8-11) are different species of the same broad genus – low force release mechanisms comprising an internal spring activation element for eliminating ordinal setup requirements and an internal release activation element. These species are related in structure and function, and therefore it would not constitute a significant additional burden to examine claims directed to all low force release mechanisms comprising an internal spring activation element for eliminating ordinal setup requirements and an internal release activation element simultaneously.

Additionally, Applicant respectfully reminds the Examiner that if a generic claim is found to be allowable, Applicant is entitled to consideration of the additional species of the allowed generic claim as provided by 37 C.F.R. § 1.146.

Applicant notes that claim 3 has been withdrawn from consideration, and claims 1, 2, and 4-9 have been elected with traverse. Applicant reserves the right to pursue the withdrawn claim in future applications.

No new subject matter has been added, and the amended and new claims should not necessitate an additional search. Support for the amended and new claims can be found in the application and claims as originally filed. Support for those amendments that cannot be found directly in the claims as filed can be found in the specification. For example, support for the amendments to the claims reciting distribution of a load force away from the trigger to permit application of a low force for release can be found in the

specification on page 4, lines 10-15, 28-30 and page 6, lines 27-32-page 7, lines 1-10 and in the drawings.

The issues raised by the Examiner in the Office Action are addressed below in the order they appear in the prior Action.

Information Disclosure Statement

Applicant acknowledges the Examiner's consideration of references cited on form PTO-892. Applicant notes that the Examiner has considered the patent, US Patent No. 6,354,904, which is mentioned in the subject application on page 2, line 13.

The Drawings Comply with 37 CFR 1.84(p) (4)

The Examiner objects to the drawings as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both a spring pin without an extension and a spring pin with an extension. Applicant respectfully traverses this objection, as the reference character "2" refers to a spring pin in all instances, and the presence or lack of the extension is not relevant to its key functions and would not confuse one of ordinary skill in the art. Removal of this objection is respectfully requested.

Specification

The specification is objected to because Applicant uses the term "hangar" on pages 3 and 6 and "hanger" on page 5. Applicant submits that the use of the term "hangar" on page 5 and elsewhere in the specification was a typographical error and that the term should have been "hanger". Applicant has amended the specification accordingly, and the term "hangar" has been corrected to "hanger" throughout.

The Examiner objects to the disclosure because the name of some of the components in the detailed description of the embodiment do not match with those recited in the claims. Applicant believes the amendments to the claims overcome these objections. For example, claims 1 and 9 have been amended to recite components that

comprise the “internal spring activation element” and the “internal release activation element”. Applicant points out, however, that the specification uses the term “main structure” when referring to the distribution of the load force in Figure 1. The specification states that “[i]n the embodiment as shown in Figure 1, the setup and operation of the low force release mechanism is illustrative of the novel qualities of the invention, namely the distribution of the load force to the main structure and the structure of the trap” (page 4, lines 28-30). In the embodiment shown in Figure 1, the distribution of the load force is to the main housing (1) and the trap (9) (see page 4, last paragraph- page 5, lines 1-13). Therefore, the term “main structure” is used in the claims.

Accordingly, reconsideration and withdrawal of the objections to the specification is respectfully requested.

Claims

Applicant thanks the Examiner for pointing out typographical errors and other informalities in the claims. Applicant has accordingly amended the claims as detailed below.

Claim 1 has been amended to reflect the Examiner’s corrections concerning the use of “the” in lines 5, 7, and 8. Applicant respectfully points out that the use of the word “release” in line 6 is correct and should not be “spring” as the Examiner has suggested.

As discussed above, the use of the term “hangar” in the specification was a typographical error and has been corrected to “hanger” throughout. Accordingly, the term “hangar” in claim 5 has been corrected to “hanger”.

In Claim 6, the use of “releae” was a typographical error and has been corrected to “spring”.

Claim 7 has been amended to recite “comprising” instead of “employs”.

Claim 9 has been amended to reflect the Examiner's corrections concerning the use of "the" in lines 5 and 7. Applicant respectfully points out that the use of the word "release" in line 6 is correct and should not be "spring" as the Examiner has suggested.

Accordingly, reconsideration and withdrawal of the objections to the claims is respectfully requested.

The Claims Comply with 35 U.S.C. §102

Rejection of Claims 1, 2, 4-7, and 9 under 35 U.S.C. 102(b) (Eakin US 3,009,729)

Claims 1, 2, 4-7, and 9 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Eakin (US 3,009,729). Applicant traverses this rejection to the extent it is maintained over the claims as amended.

The standard for anticipation is that "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 1 as amended recites a low-force release mechanism comprising: a main structure; a trap; an internal spring activation element used to eliminate ordinal setup requirement, wherein the internal spring activation element comprises an internal spring pin, an internal spring, and a release pin; at least one trigger; and attachments by which a container is attached to said main structure and trap, wherein an internal geometry of the trap is used to lock and hold a position of said trap; a load force is distributed away from the trigger to permit application of a low force for release; and an internal release activation element comprising the release pin and one or more ball bearings or slugs interacts with the geometry of the trap to permit the application of the low force on the trigger to cause the internal spring activation element to move a position of the container.

Claim 9 as amended recites a low-force release mechanism comprising: a main structure; a trap; an internal spring activation element used to eliminate ordinal setup requirement, wherein the internal spring activation element comprises an internal spring pin, an internal spring, and a release pin; at least one trigger; and attachments by which a container is attached to said main structure and trap, wherein an internal geometry of the trap is used to lock and hold a position of said trap; a load force is distributed away from the trigger to permit application of a low force for release; and an internal release activation element comprising the release pin and one or more ball bearings or slugs interacts with the geometry of the trap to permit a user to pull on a string attached to a trigger to cause the internal spring activation element to move a position of the container, such that the container collapses releasing its contents.

Eakin does not disclose the internal spring activation element of the present claims. The Examiner contends that the invention of Eakin discloses in Figures 1-4 a low-force release mechanism comprising an internal spring activation element (33). The internal spring activation element disclosed in Eakin differs from the internal spring activation element of the claimed invention in that the internal spring activation element recited in the claims comprises an internal spring pin, an internal spring, and a release pin (see e.g., components (2), (3), and (7) of Figure 1). Eakin fails to teach or suggest the internal spring pin of the spring activation element that is recited in the pending claims.

Claims 2 and 4-7 are dependent on claim 1. As discussed above, claim 1 is not anticipated by Eakin. Because a dependent claim incorporates every element of the independent claim from which it depends, the respective dependent claims of claim 1 are thus not anticipated by Eakin. Accordingly, Applicant submits that Eakin does not anticipate the pending claims. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1 and 8 under 35 U.S.C. 102(b) (Niskin US 3,729,855)

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Niskin (US 3,729,855). Applicant traverses this rejection to the extent it is maintained over the claims as amended.

The subject matter of claim 1 is described above. The Examiner states that Niskin discloses in Figures 1-4 a low-force release mechanism comprising, among other things, a trap (58) and an internal spring activation element (52), which interacts with an internal geometry (65) of the trap. The Examiner's reference to an internal spring activation element (52) is to the projection (52) on part (51). Applicant asserts that the projection (52) of Niskin is *not* an internal spring activation element. Niskin discloses that the projection (52) lifts the lip (the internal geometry to which the Examiner refers) (65) of the latch (the trap) (58) off of a latching surface (66). Niskin discloses the use of a coil spring (62) in conjunction with a ball bearing (63) to provide an orthogonal force on the latch (the trap) (58), so that the lip (65) will engage the latching surface (66). Niskin, however, fails to teach or suggest an internal spring activation element comprising an internal spring pin, an internal spring, and a release pin, as recited in the pending claims. In particular, Niskin fails to teach or suggest the release pin of the spring activation element that is recited in the pending claims.

Additionally, Niskin does not disclose distribution of the load force away from the trigger, as recited in the pending claims. As a result, the apparatus disclosed by Niskin demonstrates a potential for an unintended release. For instance, if the force that lever (56) puts on the latch (58) is greater than the orthogonal force of spring (62) and the frictional force between the latching surface (66) and latching shoulder (65), the latch (58) will rotate and release lever (56).

Claim 8 is dependent on claim 1. As discussed above, claim 1 is not anticipated by Niskin. Because a dependent claim incorporates every element of the independent claim from which it depends, claim 8 is not anticipated by Niskin. Accordingly, Applicant submits that Niskin does not anticipate the pending claims. Applicant respectfully requests reconsideration and withdrawal of this rejection.

For the reasons stated above, Applicant submits that the claimed invention is not anticipated by the cited art. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §102 rejections.

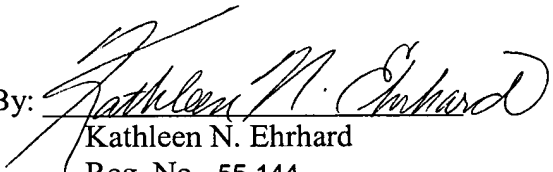
CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the pending rejections. Applicant believes that the pending claims are in condition for allowance, and early and favorable reconsideration is respectfully solicited.

If there are any fees due in connection with the filing of this Response, please charge the fees to our **Deposit Account No. 18-1945** under Order No. WMFR-P01-001.

Respectfully submitted,

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